

FIGURE 1A

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graph TD
    30((30)) --> 32[RECEIVING A REQUEST INDICATING A PRIMARY PRODUCT OR SERVICE UTILIZING A NETWORK]
    32 --> 34[DISPLAYING THE PRIMARY PRODUCT OR SERVICE ON A GRAPHICAL USER INTERFACE UTILIZING THE NETWORK IN RESPONSE THE REQUEST]
    34 --> 36[DISPLAYING AT LEAST ONE SECONDARY PRODUCT OR SERVICE ASSOCIATED WITH THE PRIMARY GRAPHICAL USER INTERFACE UTILIZING THE NETWORK IN RESPONSE THE REQUEST]
    36 --> 38[ALLOWING A USER TO SELECT THE AT LEAST ONE SECONDARY PRODUCT OR SERVICE UTILIZING THE NETWORK]
    38 --> 39{SHOPPING CART ICON}
    39 -- Y --> 40[LINKING TO A SHOPPING CART INTERFACE]
    39 -- N --> 41{ADD ICON}
    40 --> 41
    41 -- Y --> 42[ADDING THE PRIMARY PRODUCT AND ANY SECONDARY PRODUCT SELECTED BY THE USER TO SHOPPING CART]
    41 -- N --> 43{CHECK OUT ICON}
    42 --> 43
    43 -- Y --> 44[LINKING TO A CHECK OUT INTERFACE IFOR PURCHASING PURPOSES]
    43 -- N --> Exit(( ))
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32 RECEIVING A REQUEST INDICATING A PRIMARY PRODUCT OR SERVICE UTILIZING A NETWORK

34 DISPLAYING THE PRIMARY PRODUCT OR SERVICE ON A GRAPHICAL USER INTERFACE UTILIZING THE NETWORK IN RESPONSE THE REQUEST

36 DISPLAYING AT LEAST ONE SECONDARY PRODUCT OR SERVICE ASSOCIATED WITH THE PRIMARY GRAPHICAL USER INTERFACE UTILIZING THE NETWORK IN RESPONSE THE REQUEST

38 ALLOWING A USER TO SELECT THE AT LEAST ONE SECONDARY PRODUCT OR SERVICE UTILIZING THE NETWORK

39 SHOPPING CART ICON

40 LINKING TO A SHOPPING CART INTERFACE

41 ADD ICON

42 ADDING THE PRIMARY PRODUCT AND ANY SECONDARY PRODUCT SELECTED BY THE USER TO SHOPPING CART

43 CHECK OUT ICON

44 LINKING TO A CHECK OUT INTERFACE IFOR PURCHASING PURPOSES

Fig. 1B

00754081-122200

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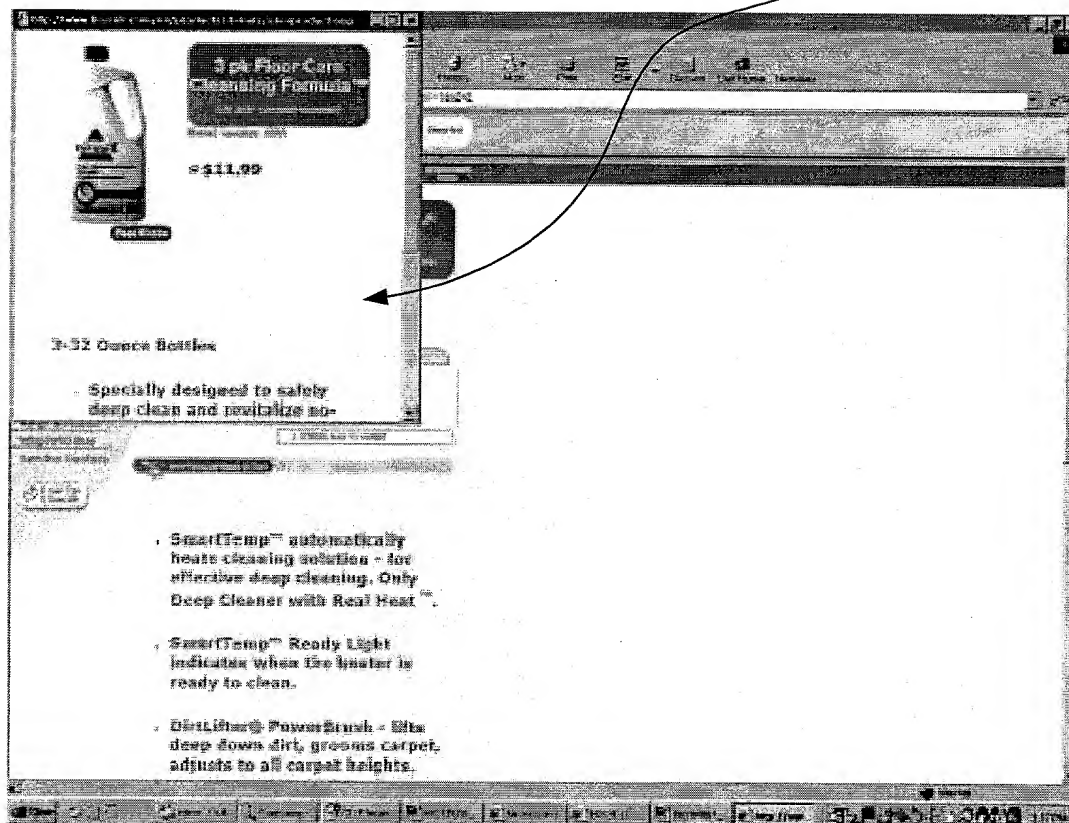


Fig. 1C

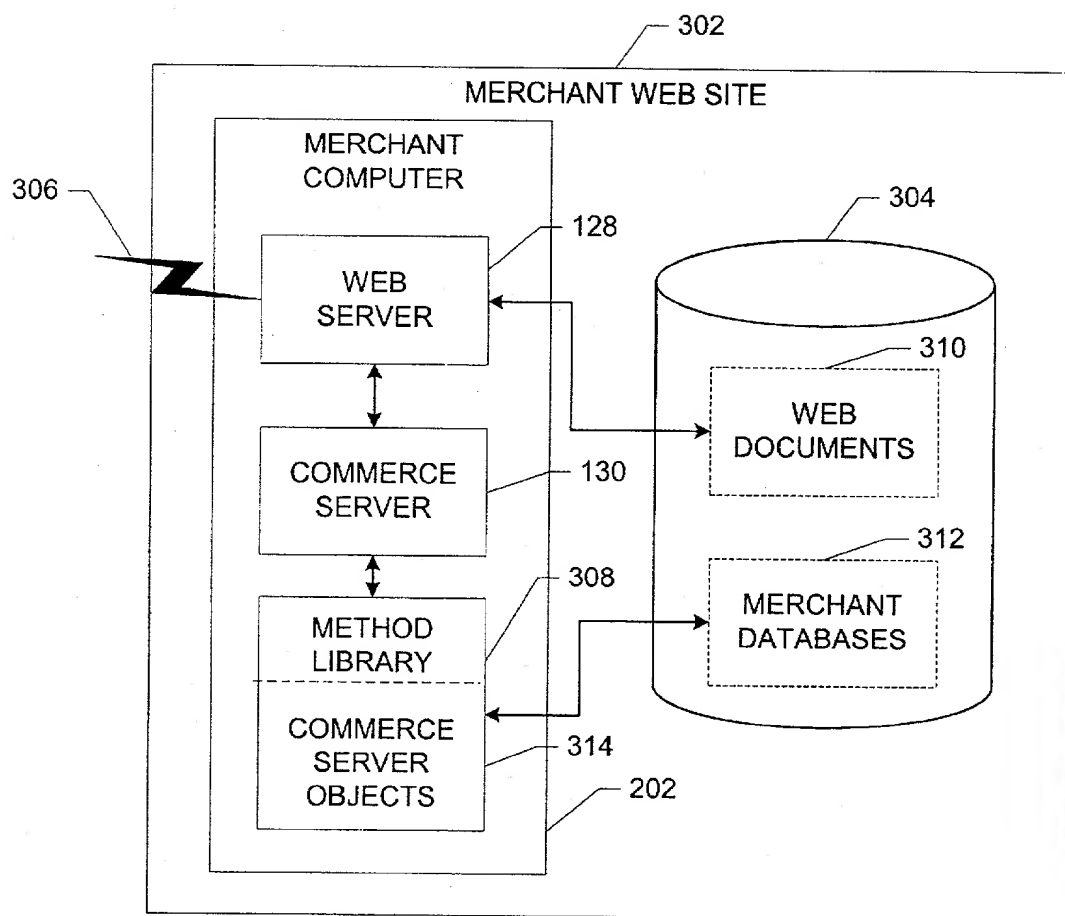


FIG. 3

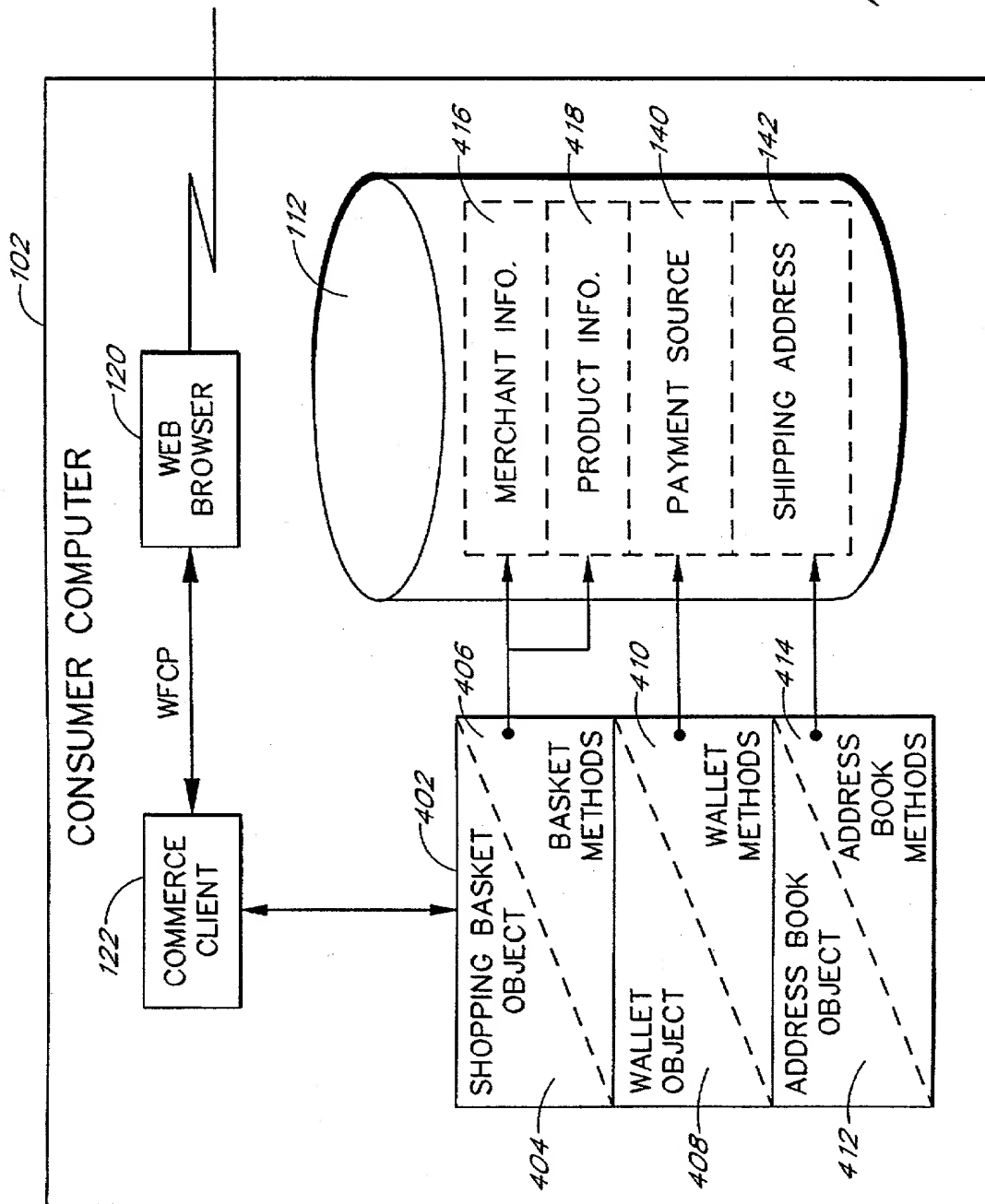


FIG. 4

09751091.122000

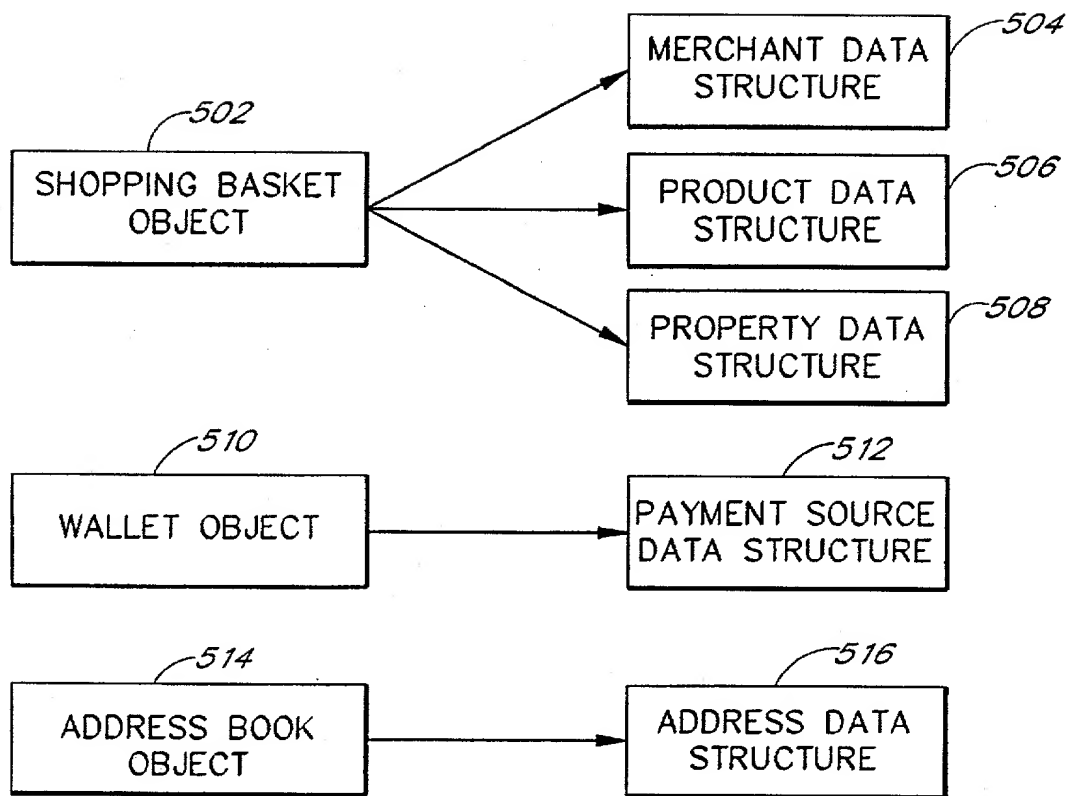


FIG. 5

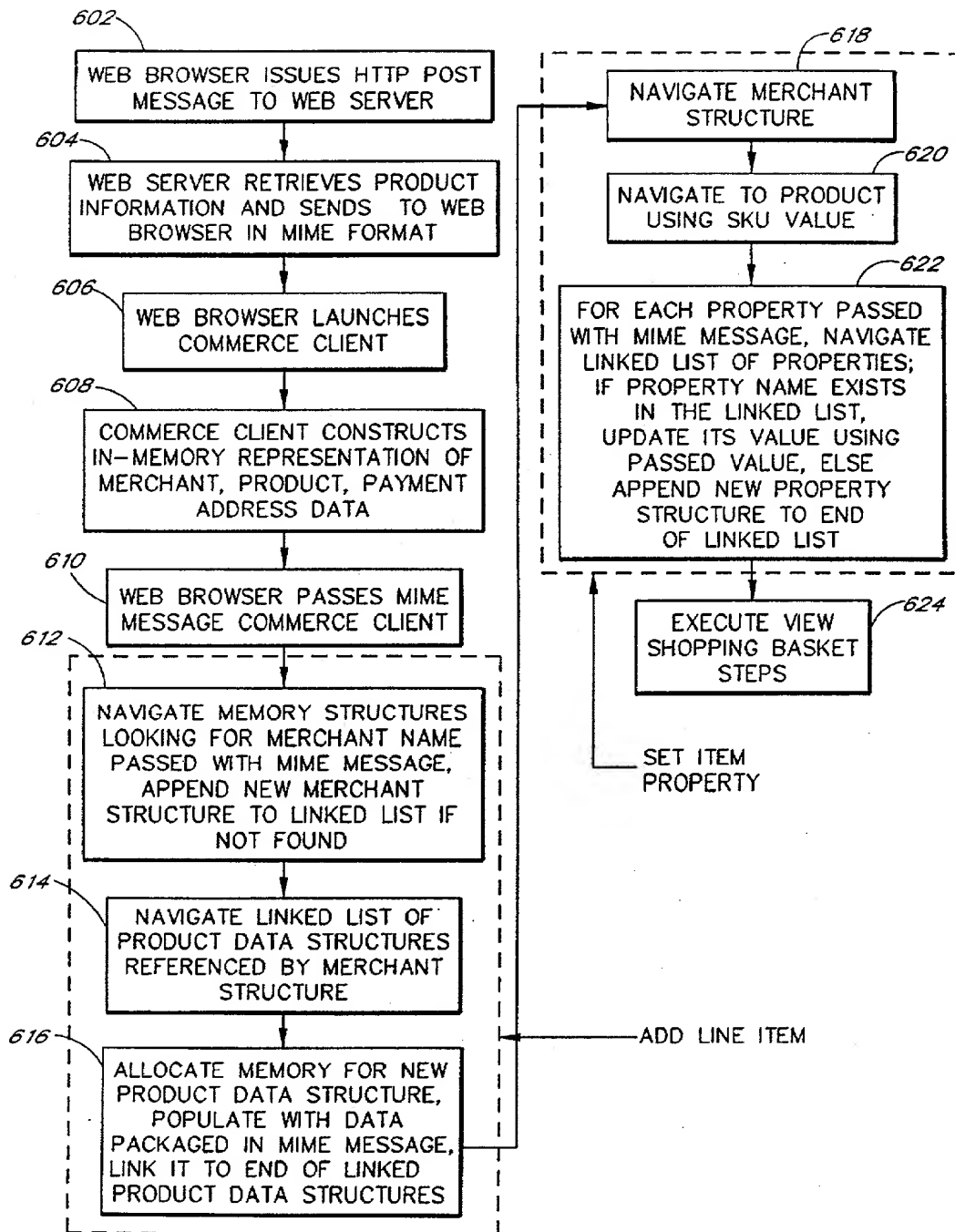


FIG. 6


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graph TD
    702[CONSUMER SELECTS VIEW SHOPPING BASKET] --> 704[WEB BROWSER ISSUES LOCAL FUNCTION CALL]
    704 --> 706[COMMERCE CLIENT IS LAUNCHED BY LOCAL PORT MONITOR]
    706 --> 708[SHOPPING BASKET COM OBJECT IS LOADED BY COMMERCE CLIENT]
    708 --> 710[CHECK FLAG = 0]
    710 --> 712[FOR ALL MERCHANTS]
    712 --> 714[NAVIGATE TO GIVEN MERCHANT]
    714 --> 716[NAVIGATE TO NEXT PRODUCT DATA STRUCTURE]
    716 --> 718{END OF LIST ?}
    718 -- YES --> 720[RETURN (0)]
    718 -- NO --> 722{IS PRODUCT FLAG = CHECK FLAG ?}
    722 -- NO --> 716
    722 -- YES --> 724[RETURN POINTER TO PRODUCT DATA STRUCTURE AND ADD PRODUCT NAME TO LIST BOX STRUCTURE]
    724 --> 726[SAVE POINTER LOCATION]
    726 --> 716
    712 -.-> 714
    712 -.-> 716
    712 -.-> 718
    712 -.-> 722
    712 -.-> 724
    712 -.-> 726

    728[NAVIGATE TO GIVEN MERCHANT] --> 730[NAVIGATE TO SAVED POINTER LOCATION]
    730 --> 732[NAVIGATE TO NEXT PRODUCT DATA STRUCTURE]
    732 --> 734{END OF LIST ?}
    734 -- YES --> 736[RETURN (0)]
    734 -- NO --> 738{IS PRODUCT FLAG = CHECK FLAG ?}
    738 -- NO --> 732
    738 -- YES --> 740[RETURN POINTER TO PRODUCT DATA STRUCTURE AND ADD PRODUCT NAME TO LIST BOX]
    740 --> 742[SAVE POINTER LOCATION]
    742 --> 744[REPEAT]
    744 --> 728
    744 --> 746[DISPLAY LIST OF ITEMS IN BASKET]
    728 -.-> 730
    728 -.-> 732
    728 -.-> 734
    728 -.-> 738
    728 -.-> 740
    728 -.-> 742
    728 -.-> 744
    728 -.-> 746
  
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FIG. 7

FIG. 7

CONSUMER SELECTS
PRODUCT NAME IN LIST

CONSUMER PRESSES DELETE
KEY, OR SELECTS REMOVE
ITEM BUTTON

DID
CONSUMER CONFIRM
DELETION
?

EXIT

USE MAINTAINED POINTER
TO PRODUCT DATA STRUCTURE
TO LOCATE PRECEDING PRODUCT
DATA STRUCTURE OR POINTER

USE MAINTAINED POINTER
TO PRODUCT DATA STRUCTURE
TO LOCATE FOLLOWING PRODUCT
DATA STRUCTURE

SET PRECEDING POINTER
TO POINT TO FOLLOWING
PRODUCT DATA STRUCTURE

FIG. 8

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graph TD
    902[CONSUMER SELECTS VIEW SHOPPING BASKET BUTTON] --> 904[CONSUMER SELECTS PRODUCT FROM SCROLLABLE LIST]
    904 --> 906[CONSUMER SELECTS SEE ITEM DETAILS BUTTON]
    906 --> 908[WEB BROWSER SENDS LOCAL HTTP POST MESSAGE]
    908 --> 910[LOCAL PORT LISTENER RECIEVES HTTP POST MESSAGE]
    910 --> 912[PORT LISTENER SENDS FUNCTION-CALLING INFORMATION TO COMMERCE CLIENT]
    912 --> 914[LOCATE PRODUCT DATA STRUCTURE USING MAINTAINED POINTER]
    914 --> 916[MAKE A DROP DOWN BOX HAVING FRIENDLY NAME OF PAYMENT SOURCE AS FIRST ENTRY]
    916 --> 918[MAKE A DROP DOWN BOX HAVING FRIENDLY NAME OF SHIPPING ADDRESS AS FIRST ENTRY]
    918 --> 920[LOCATE LINKED LIST OF PROPERTY DATA STRUCTURES]
    920 --> 922[NAVIGATE LINKED LIST OF PROPERTY DATA STRUCTURES]
    922 --> 924[CREATE LIST BOX, EACH ITEM IN LIST IS A PROPERTY NAME AND VALUE]
    924 --> 930[USE MAINTAINED ROOT POINTER TO LINKED PAYMENT SOURCE STRUCTURES TO RETURN FRIENDLY NAME OF FIRST PAYMENT SOURCE STRUCTURE]
    930 --> 932[TRAVERSE LINKED LIST OF PAYMENT SOURCE STRUCTURES, PLACING FRIENDLY NAME OF EACH IN DROP DOWN BOX]
    932 --> 934[USE MAINTAINED ROOT POINTER TO LINKED SHIPPING ADDRESS STRUCTURES TO RETURN FRIENDLY NAME OF FIRST SHIPPING ADDRESS]
    934 --> 936[TRAVERSE LINKED LIST OF SHIPPING ADDRESS STRUCTURES, PLACING FRIENDLY NAME OF EACH IN DROP DOWN BOX]
    936 --> 938[DISPLAY CHOICE BOX TO USER OFFERING CHOICES OK OR CANCEL]
    938 --> 940{DID USER CHOOSE OK?}
    940 -- NO --> 942[CLEAR LIST BOX AND DROP DOWN BOXES AND EXIT]
    940 -- YES --> 944[SET NEW FRIENDLY NAME FOR PAYMENT SOURCE AND NEW FRIENDLY NAME FOR SHIPPING ADDRESS, AND UPDATE ANY CHANGED PROPERTY VALUES]
    
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FIG. 9

FIG. 9

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graph TD
    1002[CONSUMER SELECTS VIEW WALLET OPTION] --> 1004[LOAD WALLET OBJECT]
    1004 --> 1006[USE MAINTAINED ROOT POINTER TO LINKED PAYMENT SOURCE STRUCTURES TO RETURN FRIENDLY NAME OF FIRST PAYMENT SOURCE STRUCTURE]
    1006 --> 1010[TRAVERSE LINKED LIST OF PAYMENT SOURCE STRUCTURES, PLACING FRIENDLY NAME OF EACH IN A LIST BOX]
    1010 --> 1012[ ]
    1012 --> 1014[DISPLAY BROWSABLE LIST BOX OF FRIENDLY NAMES FOR PAYMENT SOURCES]
    1014 --> 1016[DISPLAY OPTIONS TO ADD, EDIT, DELETE, OR MAKE PREFERRED PAYMENT SOURCES]
    1016 --> ADD[ADD]
    1016 --> EDIT[EDIT]
    1016 --> DELETE[DELETE]
    1016 --> MAKE_PREFERRED[MAKE PREFERRED]
    ADD --> 1018[DISPLAY DIALOG BOX WITH FIELDS FOR CARD #, EXPIRE DATE, NAME, BILLING ADDRESS, AND BANK]
    1018 --> 1020[USER FILLS IN FIELDS]
    1020 --> 1022[USER ENTERS PASSWORD TWICE]
    1022 --> 1024[WRITE ENCRYPTED BLOB, ASSOCIATE WITH FRIENDLY NAME]
    1024 --> 1036[CONFIRM OK TO DELETE]
    1036 --> 1038[DELETE PAYMENT SOURCE DATA]
    EDIT --> 1026[PROMPT USER FOR PASSWORD AND USE PASSWORD TO DECRYPT BLOB FOR EDITING]
    1026 --> 1028[DISPLAY DIALOG BOX WITH FIELDS FOR CARD #, EXPIRE DATE, NAME, BILLING ADDRESS, AND BANK]
    1028 --> 1030[USER MODIFIES FIELDS]
    1030 --> 1032[USER ENTERS PASSWORD TWICE]
    1032 --> 1034[WRITE ENCRYPTED BLOB, ASSOCIATE WITH FRIENDLY NAME]
    1034 --> 1040[ASSOCIATE SELECTED FRIENDLY NAME WITH DEFAULT PAYMENT SOURCE]
    
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FIG. 10

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graph TD
    1102[CONSUMER SELECTS VIEW ADDRESS BOOK] --> 1104[LOAD ADDRESS BOOK OBJECT]
    1104 --> 1106[USE MAINTAINED ROOT POINTER TO LINKED SHIPPING ADDRESS STRUCTURES TO RETURN FRIENDLY NAME OF FIRST SHIPPING ADDRESS STRUCTURE]
    1106 --> 1110[TRAVERSE LINKED LIST OF SHIPPING ADDRESS STRUCTURES, PLACING FRIENDLY NAME OF EACH IN A LIST BOX]
    1110 --> 1114[DISPLAY BROWSABLE LIST BOX OF FRIENDLY NAMES FOR SHIPPING ADDRESSES]
    1114 --> 1116[DISPLAY OPTIONS TO ADD, EDIT, DELETE, OR MAKE PREFERRED SHIPPING ADDRESSES]
    1116 --> ADD[ADD]
    1116 --> EDIT[EDIT]
    1116 --> MAKE_PREFERRED[MAKE PREFERRED]
    1116 --> DELETE[DELETE]
    ADD --> 1118[DISPLAY DIALOG BOX WITH FIELDS FOR STREET ADDRESS, CITY, STATE, ZIPCODE, COUNTRY, AND NAME]
    1118 --> 1120[USER FILLS IN FIELDS]
    1120 --> 1122[USER SELECTS OK TO SAVE]
    1122 --> 1110
    EDIT --> 1124[DISPLAY DIALOG BOX WITH FIELDS FOR STREET ADDRESS, CITY, STATE, ZIPCODE, COUNTRY, AND MORE]
    1124 --> 1126[USER FILLS IN FIELDS]
    1126 --> 1128[USER SELECTS OK TO SAVE]
    1128 --> 1110
    MAKE_PREFERRED --> 1134[ASSOCIATE SELECTED FRIENDLY NAME WITH DEFAULT SHIPPING ADDRESS]
    1134 --> 1110
    DELETE --> 1130[CONFIRM OK TO DELETE]
    1130 --> 1132[DELETE SHIPPING ADDRESS DATA]
    1132 --> 1110

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FIG. 11

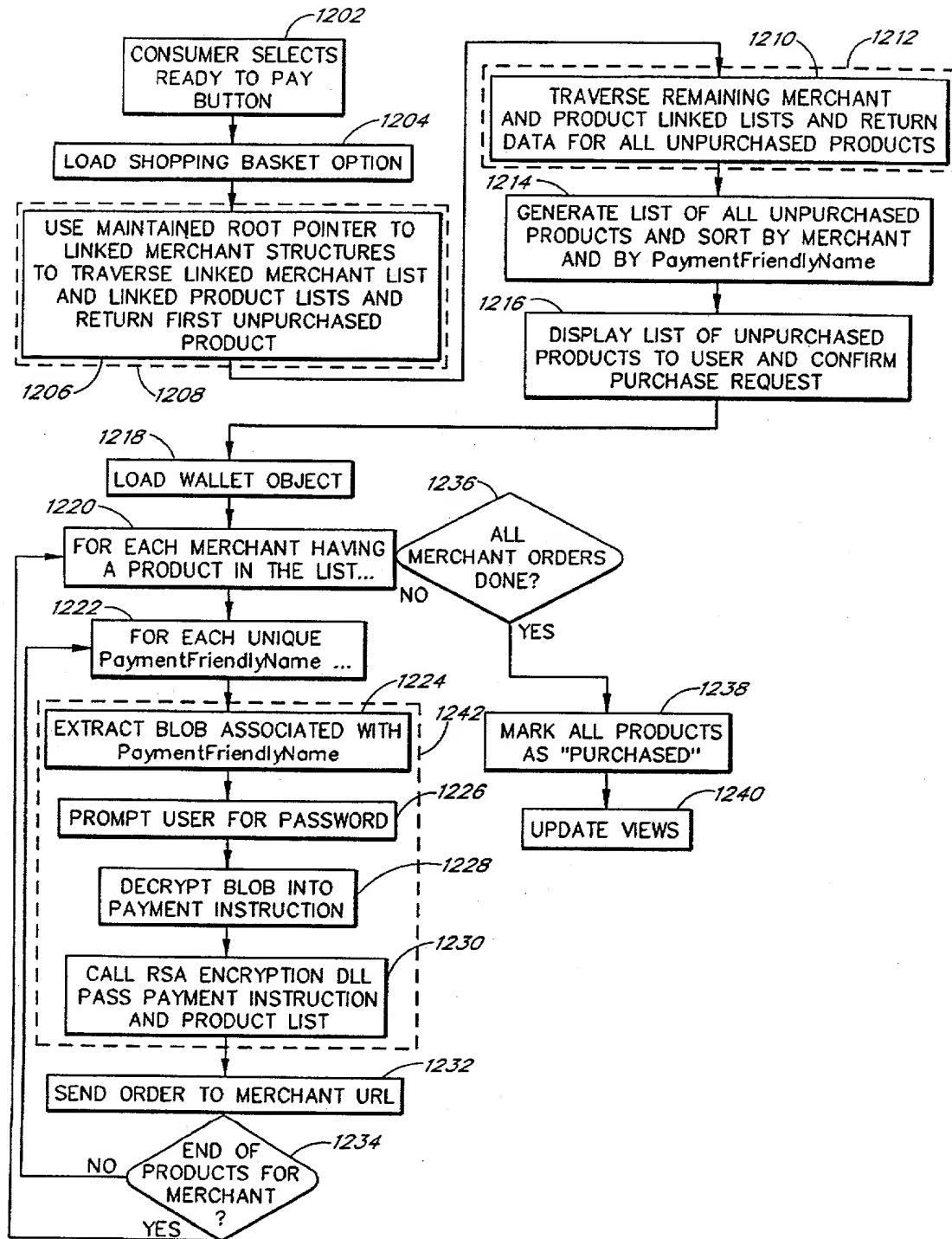


FIG. 12